

CLAIMS

1. A method for managing printer selection in a network of connected printers, the method comprising:

5 accepting a print job;
 determining characteristics of the print job;
 selecting a printer in response to a programmable administrative policy that cross-references user-defined usage criteria to print job characteristics; and,
 sending the print job to the selected printer.

10

2. The method of claim 1 further comprising:
 programming the administrative policy to accept user-defined definitions for the usage of at least one printer in a network of connected printers.

15

3. The method of claim 1 further comprising:
 accepting a pre-determined matrix cross-referencing specification-defined printer capabilities to print job characteristics, for at least one printer in a network of connected printers; and,
20 modifying the specification-defined printer capabilities with user-defined printer usages, to create the administrative policy.

4. The method of claim 2 wherein programming an administrative policy includes establishing an administrative policy
25 responsive to print job characteristics selected from the group including user identity, client identity, the document processing application

sourcing the print job, the document format, media, document complexity, color/BW, rendering, content, job scheduling, and printer capabilities.

5. The method of claim 2 wherein programming an
5 administrative policy includes establishing an administrative policy that
secondarily cross-references print job characteristics to printer
environment conditions selected from the group including printer
availability, printer loading, specification-defined speed, printer
capabilities, and printer locality.

10

6. The method of claim 2 wherein programming an
administrative policy includes establishing an administrative policy that
prompts an action, in response to not matching print job characteristics,
selected from the group including canceling the print job, creating a user
15 interface (UI) to request additional selection criteria, and creating a UI for
the manual selection of a printer.

7. The method of claim 1 wherein accepting a print job
includes accepting the print job at a client print subsystem;

20 the method further comprising:

a print subsystem activity selected from the group including
accepting the print job at a print driver, spooling the print job, despooling
the print job, post-processing the print job, and sending the job to the port
manager; and,

wherein selecting a printer in response to a programmable administrative policy includes initiating the printer selection in response to a print subsystem activity.

5 8. The method of claim 7 wherein selecting a printer in response to a programmable administrative policy includes accessing the administrative policy stored in a client-side repository.

 9. The method of claim 8 further comprising:
10 accepting the administrative policy, distributed from a network server repository; and,
 storing the administrative policy in a client repository.

 10. The method of claim 9 wherein accepting the
15 administration policy from a network server repository additionally includes accepting a print driver and path information for a network-connected printer from the network server repository;

 wherein storing the administrative policy in the client repository additionally includes storing the print driver and path
20 information in the client repository; and,
 the method further comprising:
 installing the print driver and path information in the client print subsystem.

11. The method of claim 10 wherein accepting the administrative policy, distributed from a network server repository, includes accepting administrative policy updates; and, wherein storing the administrative policy in a client repository includes storing the administrative policy updates.

12. The method of claim 1 wherein accepting a print job includes accepting the print job at a network server; and, wherein selecting a printer in response to a programmable administrative policy includes accessing the administrative policy stored in a network server repository in response to receiving the print job at the network server.

13. A system for managing printer selection in a network of connected printers, the system comprising:
a programmable administrative policy residing in a memory repository that cross-references user-defined printer usage criteria to print job characteristics; and,
a printer select module having an interface to accept determined characteristics for a print job, an interface for accessing the administrative policy, and an interface to direct the print job to a selected printer.

14. The system of claim 13 further comprising:

a plurality of printers, each having an interface, selected from the group including local, remote, and network-connections, to the print select module for receiving print jobs.

5 15. The system of claim 13 wherein the administrative policy has a user interface (UI) for programming the administrative policy to accept user-defined definitions for the usage of at least one printer in a network of connected printers.

10 16. The system of claim 15 wherein the administrative policy is responsive to print job characteristics selected from the group including user identity, client identity, the document processing application sourcing the print job, the document format, media, document complexity, color/BW, rendering, content, job scheduling, and printer
15 capabilities.

 17. The system of claim 15 wherein the administrative policy secondarily cross-references print job characteristics to network conditions selected from the group including printer availability, printer
20 loading, specification-defined speed, printer capabilities, and printer locality.

 18. The system of claim 15 wherein the administrative policy prompts an action, in response to not matching print job
25 characteristics, selected from the group including canceling the print job,

requesting additional selection criteria, and manual selection of a printer;
and,

wherein the printer select module includes a UI for accepting
user commands responsive to the administrative policy action prompts.

5

19. The system of claim 15 further comprising:

a client device print subsystem including a print driver,
spooler, print processor, and port manager; and,

wherein the print select module resides in the client print
10 subsystem and initiates the selection of a printer in response to a print
subsystem activity selected from the group including accepting the print
job at a print driver, spooling the print job, despooling the print job, post-
processing the print job, and sending the print job to the port manager.

15 20. The system of claim 19 wherein printer select module
initiates the printer selection in response to print driver activity, and
selects a printer in response to print job characteristics that are
determined by the print driver.

20 21. The system of claim 19 wherein printer select module
initiates the printer selection in response to spooler activity, and selects a
printer in response to information derived from a print subsystem element
chosen from the group including the spooler, print processor, and port
manager.

25

22. The system of claim 19 wherein the administrative policy repository resides with the client.

23. The system of claim 22 further comprising:
5 a network server including a repository with a master administrative policy; and,
wherein the client repository receives and stores the administrative policy distributed by the network server repository.

10 24. The system of claim 23 wherein the network server repository includes print drivers and path information for network-connected printers;
wherein the client repository receives and stores the print drivers and path information distributed by the network server repository;
15 and,
wherein the client print subsystem accesses the client repository for the installation of print drivers and path information.

25. The system of claim 24 wherein the network server
20 repository receives and stores administrative policy updates; and,
wherein the client repository receives and stores administrative policy updates distributed by the network server repository.

26. The system of claim 13 wherein the administrative policy has a UI for modifying specification-defined printer capabilities with user-defined printer usages.

- 5 27. The system of claim 15 further comprising:
a network server;
wherein the print select module resides in the network server
and initiates the selection of a printer in response to accepting determined
print job characteristics; and,
- 10 wherein the administration policy repository resides in the
network server.